

Listing of claims:

1. **(Currently amended)** An etching solution for the production of integrated circuits comprising 5- 20% by weight hydrofluoric acid,
~~an organic~~ a solvent mixture consisting essentially of, ~~individually or as a mixture of at least~~
two solvents selected from ethylene glycol, propylene glycol, ethanol, and glycerol, and
1-20 % by weight water ~~for the production of integrated circuits.~~

2. **(Canceled)**

3.**(Canceled)**

4.**(Currently amended)**, An Etching solution according to Claim 1, comprising, as ~~organic~~
solvent mixture, ethylene glycol and glycerol in a mixing ratio of from 1:10 to 10:1.

5.**(Currently amended)** An Etching solution according to Claim 1, comprising, as ~~organic~~
solvent mixture, ethylene glycol and glycerol in a mixing ratio of from 1:5 to 5:1.

6. **(Canceled)**

7. **(Previously presented)** An Etching solution according to Claim 1, comprising a mixture of high-purity individual components.
8. **(Withdrawn)** A method for the selective etching of doped silicate layers comprising treating said doped silicate layers with an etching solution according to Claim 1.
9. **(Withdrawn)** A method according to claim 8, wherein said doped silicate is boron doped glass.
10. **(Withdrawn)** A method according to claim 8, wherein said doped silicate is phosphorous doped glass.
11. **(Withdrawn)** A method according to claim 8, wherein said doped silicate is boron-phosphorous doped glass.
12. **(Withdrawn)** A method according to claim 8, wherein said selective etching is carried out in a spin etcher.
13. **(Withdrawn)** A method according to claim 8, wherein said selective etching is carried out in a drip etcher.
14. **(Previously presented)** An etching solution according to claim 1, wherein said water is from 6.4 -20 % by weight.

15. (New) An etching solution comprising:

5- 20% by weight hydrofluoric acid,

a solvent mixture consisting essentially of a mixture of at least two solvents selected from ethylene glycol, propylene glycol, ethanol, and glycerol,

and

1-20 % by weight water for the etching of doped silicate layers.

16. (New) An etching solution comprising:

5- 20% by weight hydrofluoric acid,

a solvent mixture comprising a mixture of at least two solvents selected from ethylene glycol, propylene glycol, ethanol, and glycerol,

and

1-20 % by weight water for the etching of doped silicate layers.